ZooKeys 108: 67–72 (2011)
doi: 10.3897/zookeys.108.1208
www.zookeys.org

RESEARCH ARTICLE

A peer-reviewed open-access journal
ZooKeys
Launched to accelerate biodiversity research

A new *Stenoloba* Staudinger species from China (Lepidoptera, Noctuidae, Bryophilinae)

Oleg Pekarsky

H-1068 Budapest, Felsőerdősor u. 16-18, Hungary

urn:lsid:zoobank.org:author:40DC027F-FCF3-4953-AC60-C071E814A768

Corresponding author: *Oleg Pekarsky* (opbp@t-online.hu)

Academic editor: *Donald Lafontaine* | Received 7 March 2011 | Accepted 25 May 2011 | Published 17 June 2011

urn:lsid:zoobank.org:pub:A05C9EEE-C364-4D67-86A8-2B558CEE429

Citation: Pekarsky O (2011) A new *Stenoloba* Staudinger species from China (Lepidoptera, Noctuidae, Bryophilinae). ZooKeys 108: 67–72. doi: 10.3897/zookeys.108.1208

Abstract

A new species of *Stenoloba*, *S. viridicollar* **sp. n.** (Lepidoptera, Noctuidae) is described from Sichuan, China. Illustrations of adults and the genitalia of both sexes are provided. A diagnostic comparison is made with *Stenoloba rufosagitta* Kononenko & Ronkay, 2001 *and S. rufosagittoides* Han & Kononenko, 2009.

Keywords

Lepidoptera, Noctuidae, *Stenoloba*, new species, China

Introduction

Stenoloba Staudinger, 1892 is an East Asian genus of the subfamily Bryophilinae. It was included in the subfamily Acontiinae (sensu auctorum) by early authors until Sugi (1970) revised the Japanese species of the genus and established its position in the Bryophilinae. The East Asian fauna of the genus was revised by Kononenko and Ronkay (2000, 2001). Chen (1999) only listed seven species of *Stenoloba* from China. A complete review of Chinese *Stenoloba* was published by Han & Kononenko (2009), listing 37 species known to occur in China. The genus presently includes, according to the last remarkable contribution on the taxonomy of the genus (Behounek and Kononenko 2010), 75 species which are arranged in 14 species groups by Behounek and Kononenko.

Copyright *O. Pekarsky*. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

During a study of the Chinese *Stenoloba* material collected by Viktor Sinyaev in Sichuan province in 2008, it was surprising to find that the *S. glaucescens* species-group contains another undescribed, species. The new species, described below, externally resembles *S. rufosagitta* and *S. rufosagittoides*, but has clearly recognisable differences in its external and genital features.

Systematic part

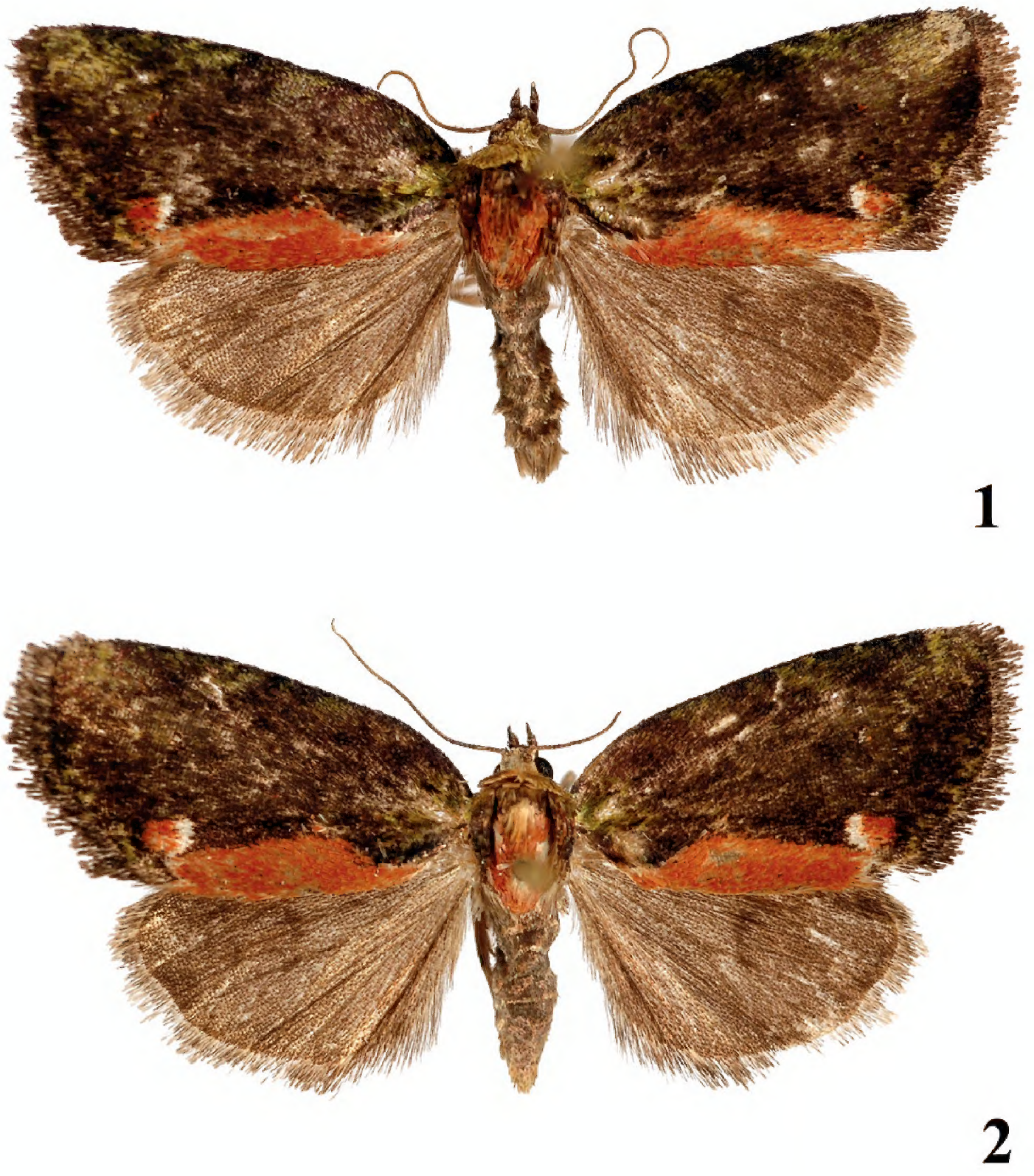
***Stenoloba viridicollar* Pekarsky sp. n.**
urn:lsid:zoobank.org:act:DBF5569D-E216-4C8B-8A41-7DE6CB32DA69
http://species-id.net/wiki/Stenoloba_viridicollar
Figs 1–4

Holotype. Male, China, Sichuan, Lao Lin Kou, 1900m, 28°21'N, 103°26'E, 26.vi.–12.vii.2008, leg. Viktor Sinyaev; slide No.: OP1034m (coll. O. Pekarsky, deposited in the HNHM Budapest).

Paratype. China, Sichuan: 2 males, 2 females, with same data as for holotype (coll. O. Pekarsky).

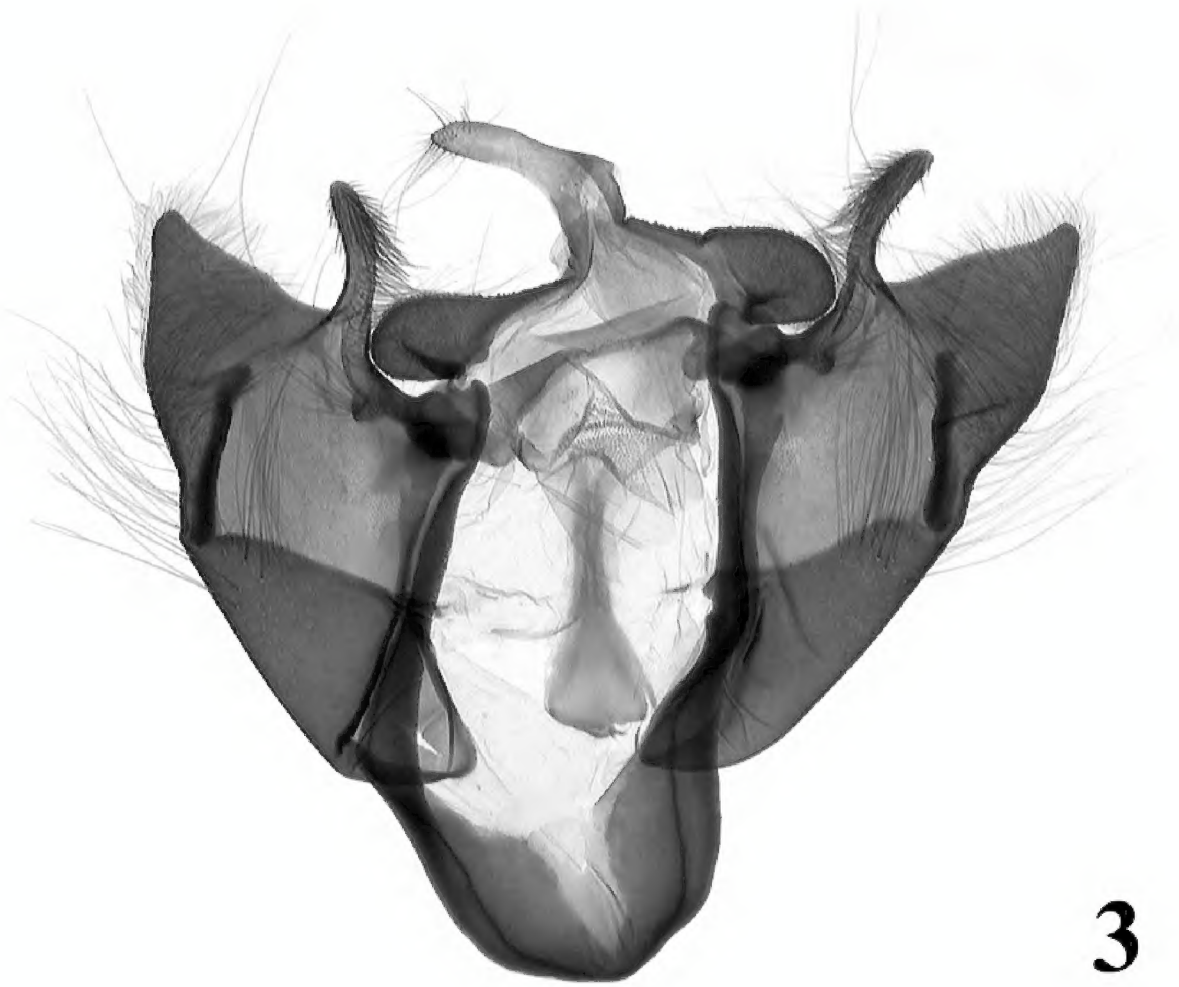
Diagnosis. The new species is externally similar to *S. rufosagitta* and *S. rufosagittoides*, combining characteristics of both relatives. The most prominent distinguishing feature is the greenish-grey colouration of the head and collar, which are grey brown to dark brown in the two related species. In addition, *S. viridicollar* differs from *S. rufosagitta* by the more oblique and less arched outer margin and more unicolorous pattern of the forewing. It differs from *S. rufosagittoides* by its broader forewing with a wider marginal area. The basal area of the new species is less marked then in the other two species. The specific features of the male genitalia are the shape of the valva, the shape and size of the the ampulla, and the structure of the vesica. The most conspicuous autapomorphy of *S. viridicollar* is the rather short triangular valva with more or less straight costal and ventral margins, and the acutely triangular cucullus without a hooked tip or subapical process but with a long, narrow ampulla. The new species is easily distinguishable from the related two species because *S. rufosagitta* has a long, rod-like valva with more or less parallel costal and ventral margins, a somewhat rounded cucullus with fine, short, hooked tip, and the ampulla is missing; *S. rufosagittoides* is characterized by the long, hooked, rather claw-like apical saccular extension and the asymmetrical subapical costal processes.

Description. Male. (Fig. 1). Wingspan 22 mm. Head and collar greenish grey, thorax blackish grey, with rufous mesothorax and blackish-grey tegulae mixed sparsely with rufous scales; abdomen blackish grey. Forewing relatively short, slightly dilated towards outer edge; costa arched basally; apex finely pointed; outer margin more oblique and straighter than in *S. rufosagittoides* and even more so than in *S. rufosagitta*. Ground colour of forewing blackish brown, wing pattern diffuse, less traceable than in *S. rufosagittoides*; basal field and costal area with small greenish



Figures 1–2. Adults. **1** *Stenoloba viridicollar* sp. n., holotype male, China **2** *Stenoloba viridicollar* sp. n., paratype female, China.

patches between crosslines; crosslines dark blackish grey, basal line relatively strongly marked; subbasal line defined indistinctly by green scales; antemedial line S-shaped, obsolescent; medial area somewhat darker than ground colour; postmedial line undulate; subterminal line present but indistinct; typical noctuid maculation hardly recognisable, reniform stigma somewhat more sharply defined with some black and rufous spots; inner margin with conspicuous rufous "pirate sword"-shaped stripe extending from base of wing to postmedial line; tornal patch rufous with white scales



3

4

5

Figures 3–5. Genitalia **3, 4** *Stenoloba viridicollar* sp. n., male genitalia, holotype, China, slide No. OP1034m **5** *Stenoloba viridicollar* sp. n., female genitalia, paratype, China, Slide No. OP0369f.

inside and with black scales outside; termen suffused with green; cilia as for ground colour. Hindwing uniformly dark brown, discal spot hardly traceable. Female. (Fig. 2) as for male but somewhat larger in size (wingspan 24 mm), with less expressed forewing pattern.

Male genitalia (Figs 3, 4). Genital armature with opened valvae looks like an equilateral triangle; all structures heavily sclerotized. Uncus short and strong, triangular and flattened; tegumen two times shorter than vinculum; penicular lobes large, verrucose; juxta long, deltoidal, with rounded basal (ventral) side and long, thin apical (dorsal) extension; vinculum with saccus wide and massive; valvae symmetrical, massive, shortly triangular with very wide base and short apical section with straight sides; sacculus rather narrow, short, covered by small pimples from middle; costa very short; ampulla long, slender and arcuate, bearing relatively short bristles; editum with 12 long bristles. Aedeagus relatively long and thin, bulbus ejaculatorius wide, carina covered by fine denticles. Vesica tubular, everted posteriorly, then bent ventrad and recurved along ventral side of aedeagus. Basal tube membranous, medial section dilated and inflated, rather globular, with short subconical frontal diverticulum and somewhat longer but thinner ventro-lateral diverticulum. Ventral surface of medial section and distal tube densely scobinate and finely spinose; dorsal side of distal tube with large, sclerotised crest-like cornutus.

Female genitalia (Fig. 5). Ovipositor short, conical; apophyses anteriores short and thin, wide based; apophyses posteriores relatively long and stout, four times longer then apophyses anteriores. Antrum long, wide, heavily sclerotized; ductus bursae similarly sclerotised, with narrow membranous ring ("neck") between antrum and ductus bursae; appendix bursae semiglobular-subconical, membranous; corpus bursae with narrower posterior part and elliptical-ovoid proximal section.

Note. It is worth mentioning that the two other species in the *S. rufosagitta* group were described only from males, so the identification of the female of the new species is based on external features. The characteristic greenish colouration of the head and collar corresponds well with those of the male and differs prominently from that of the two related taxa. Moreover, all moths of the type series were collected in the same site and date and no other *Stenoloba* species were found together with them.

Etymology. The name "*viridicollar*" refers to the greyish-green coloration of head and collar, which is the main external distinguishing character of the species.

Distribution. The species is known only from the type-locality, South-West China, Prov. Sichuan, Lao Lin Kou.

Acknowledgements

I would like to express my profound gratitude to László Ronkay for aid and support.

References

Behounek G, Kononenko VS (2010) Fourteen new species of the genus *Stenoloba* Staudinger, 1892 from South East Asia (Lepidoptera: Noctuidae, Bryophilinae). Zootaxa 2679: 1–31.

Chen YX (1999) Lepidoptera, Noctuidae. In: Zhu HF et al. (Ed) Fauna Sinica Insect, Vol. 16. Science Press, Beijing, 1596 pp.

Han HL, Kononenko VS (2009) A review of the genus *Stenoloba* Staudinger, 1892 from China, with description of 6 new species and 7 new records for China (Lepidoptera: Noctuidae, Bryophilinae). Zootaxa 2268: 1–22.

Kononenko VS, Ronkay L (2000) A revision of the genus Stenoloba Staudinger, 1892 (Lepidoptera, Noctuidae, Bryophilinae) with description of 25 new species and 3 new subspecies from East Asia (I). Insecta Koreana 17(3): 137–174.

Kononenko VS, Ronkay L, (2001) A revision of the genus Stenoloba Staudinger, 1892 (Lepidoptera, Noctuidae, Bryophilinae) with description of 15 new species and 3 new subspecies from East Asia (II). Insecta Koreana 18(2): 95–121.

Sugi S (1970) Notes on the genus *Stenoloba*, with description of a new genus. Kontyu 38(2): 130–135.